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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/941,970	08/29/2001	Ashok Rampal	RLL-170US	7742

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EXAMINER	
YOUNG, MICAH PAUL	
ART UNIT	PAPER NUMBER
1615	

DATE MAILED: 08/19/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 09/941,970	Applicant(s) RAMPAL ET AL.	
	Examiner Micah-Paul Young	Art Unit 1615	

-- The MAILING DATE of this c mmunication appears on the c ver sheet with the c rrespondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *24 June 2003* .

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1,2 and 5-12* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1,2 and 5-12* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11)☐ The proposed drawing correction filed on _____ is: a)☐ approved b)☐ disapproved by the Examiner.

If approved, corrected drawings are required in reply to this Office action.

12)☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

13)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____ .

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

14)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).

a) ☐ The translation of the foreign language provisional application has been received.

15)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ .
4) ☐ Interview Summary (PTO-413) Paper No(s). _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other:

DETAILED ACTION

Acknowledgment of Papers Received: Response dated 6/24/03.

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

2. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

3. Claims 1,2 and 5-12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Talwar et al (WO 00/15198) in view of Fuisz (USPN 5,518,730), Ayer et al (USPN 6,096,339) and Misra et al (USPN 5,869,098). The claims recite a controlled release formulation of an antibiotic composition comprising low percentages of rate controlling polymers. Claim 5 – 10 recite the particular polymers, which are useful in the invention including cellulose derivatives, acrylic acid polymers, and polyuronic acid. Claim 11 recites a monolithic controlled release formulation. Claim 12 recites a process of preparing the formulation of the invention.

Talwar et al discloses controlled release formulation comprising cellulosic polymers and antimicrobial/bacterial agents. Among the agents named are ciprofloxacin and clarithromycin, an erythromycin derivative, (pg. 14, para. 2). The active agent is present in most embodiments about 70% w/w total weight of the tablet (examples). The formulation further comprises cellulosic polymers such as hydroxypropyl methylcellulose in concentrations from 0.5% to about 5% w/w total weight of the tablet (pg. 20, para. 4 – pg. 21, para. 1). The tablet further comprises

xanthum gum (examples), sodium alginate (example 4), and Carbopol (example 1). The tablet can be a monolithic formulation comprising up to 1000 mg of the active agent, ciprofloxacin, where the total tablet weight is 1400 mg (example 3). The examples provide ample disclosures to processing the tablets by mixing the components.

What is lacking is a working example of clarithromycin as the active agent in the monolithic formulation. Ciprofloxacin and erythromycin, along with its' derivatives are well known antibiotics. Substituting and interchanging these compounds is well within the level of ordinary skill in the art. As seen in Fuisz, which discloses a controlled release formulation where erythromycin and ciprofloxacin are listed as possible bio-effective agents (col. 8, lin. 20 – 30; claim 5). The composition also comprises rate-controlling polymers and other additives, such as hydroxypropylmethylcellulose (col. 10, lin. 13 – 38).

Ayer et al discloses a controlled release formulation where erythromycin and ciprofloxacin are possible bio-effective agents (example 4; col. 11, lin. 65 – 67). The dosage form further comprises the acrylic polymer Carbopol as a polymeric component (col. 15, lin. 25 – 30).

Misra et al discloses a controlled release formulation where clarithromycin and ciprofloxacin are listed as possible bio-effective agents (col. 8, lin. 53 – col. 10, lin. 29; col. 12, lin. 35 – 38). The formulation further comprises rate-controlling polymers such as cellulose derivatives (col. 12, lin. 10 – 15).

With this taken into consideration, one of ordinary skill in the art would have been motivated to combine the teachings of the references. A skilled artisan would have been motivated to substitute the similar active agents of the reference into the formulation of Talwar,

using the method of Talwar, in order to impart antibiotic properties on the formulation. Talwar provides the teachings that a monolithic dosage form is possible of antibiotics such as ciprofloxacin and erythromycin derivatives like clarithromycin. There would have been a reasonable level of expectation at the time of the invention, which would have resulted in a monolithic single dosage of clarithromycin.

Response to Arguments

4. Applicant's arguments filed 6/24/03 have been fully considered but they are not persuasive. Applicant argues that:

a. There is no motivation to combine the Talwar with the supporting references

b. There is no motivation to substitute ciprofloxacin for clarithromycin

c. These combination would be the result of hindsight reasoning

5. With regard to argument a., applicant is reminded that Talwar provides the majority of the teachings and suggestions while Fuisz, Ayer and Misra are merely used to support and show the level of skill in the art. One cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.,* 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986). Talwar establishes that ciprofloxacin and clarithromycin would work equally well in the formulation discloses in the examples, the supporting reference reinforce the use of both compounds in similar formulations comprising rate controlling polymers such as Carbopol, and hydroxypropylcellulose.

6. With regard to argument b., The Office appreciates applicant's disclosures regarding the temporal and spatial properties associated with ciprofloxacin and clarithromycin. However these

limitations to the release of the drug profiles are not including in the claims of record. It is noted that the features upon which applicant relies (i.e., spatial and temporal release profiles of the active compounds) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993). The office cannot base patentability on limitations, which are not expressed in the claims.

In response to applicant's argument c., that the examiner's conclusion of obviousness is based upon improper hindsight reasoning, it must be recognized that any judgment on obviousness is in a sense necessarily a reconstruction based upon hindsight reasoning. But so long as it takes into account only knowledge which was within the level of ordinary skill at the time the claimed invention was made, and does not include knowledge gleaned only from the applicant's disclosure, such a reconstruction is proper. See *In re McLaughlin*, 443 F.2d 1392, 170 USPQ 209 (CCPA 1971).

For these reason the present claims remain obviated by the prior art.

Conclusion

7. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period

will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Correspondence

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Micah-Paul Young whose telephone number is 703-308-7005. The examiner can normally be reached on M-F 7:00 am - 3:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thurman K Page can be reached on 703-308-2927. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-1234.

Micah-Paul Young
Examiner
Art Unit 1615

MP Young

THURMAN K. PAGE
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 1600